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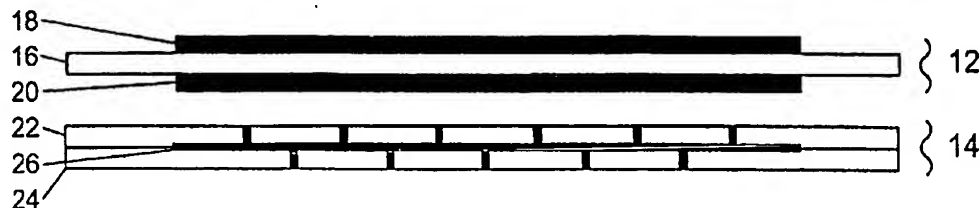
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(54) Title: A FUEL CELL GAS SEPARATOR



(57) Abstract: A fuel cell gas separator (14) between two planar solid oxide fuel cells (12) comprises a first layer (22) which is formed of a material that is impermeable to gases, a second layer (24) which is formed of a material that is impermeable to gases. The first and second layers have perforations (28) through their thickness which are closed by electrically conductive plug material (30). A third intermediate layer (26) between the first and second layers is electrically conductive and is in electrical contact with the plug material in the perforations through the first and second layers. The perforations in the first layer may be offset relative to the perforations in the second layer. The electrically conductive plug material in the perforations of the first and second layers may be the same, and may also be the same as the material of the third intermediate layer. The electrically conductive material may be silver or a silver-based material such as a silver-glass composite. Electrically conductive coatings may be provided over the electrode-contacting zones of the first and second layers.